

TEXAS DEPARTMENT OF INSURANCE

Engineering Services / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION

RC-293

Effective July 1, 2011

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **June 2015**.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

LS 150 DBL 16-24, 16" wide, Minimum 24 gauge Steel Panel Installed Over 19/32" Plywood manufactured by:

Lone Star A. Metal Roofing Systems, Inc.
1917 Flour Bluff Drive
Corpus Christi, TX 78418
(361) 939-1101

are accepted for use in designated catastrophe zones along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

LS 150 metal roof panels are manufactured from 24 gauge, coated steel, with a minimum yield strength of 50,000 psi. The steel roofing panels are 16" wide with a 1.5" deep double-lock side joint. The available panel coatings are Galvalume, Galvanized, Acrylic, Siliconized Polyester, Urethane and PVF2 (Kynar).

LIMITATIONS

Roof Decking: The LS 150 metal roof panels shall be installed over a minimum of 19/32" thick plywood decking.

New Roof Deck Attachment: The roof decking shall meet or exceed the uplift requirements of the International Residential Code and International Building Code, and the decking shall be installed in a manner to resist lateral loads.

Design Wind Pressures: For installations to nominal 19/32" thick plywood roof decks, design wind pressure limitations are specified in Table 1.

Installation Over an Existing Roof Covering: Installation over an existing roof covering is not permitted.

Roof Slope: The panels shall not be installed on roofs with a roof slope less than 2:12 and on slopes greater than 8:12.

INSTALLATION INSTRUCTIONS

General Installation Requirements:

All International Residential Code (IRC) and the International Building Code (IBC) requirements must be satisfied and manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

Panel Installation Requirements

Panels: Panels shall be attached in accordance with Table 1.

Table 1

Attachment of 24 Ga., 16" Wide LS 150 DBL Panel to Nominal 19/32" Plywood Structural Panel Roof Deck:

Design Pressure (psf)	Fastener Type	Clip Spacing
-84	No. 10-12 (12 threads per inch) x 1.5" long Pancake head wood screws, two screws per clip	6" o.c.
-72.2	No. 10-12 (12 threads per inch) x 1.5" long Pancake head wood screws, two screws per clip	2'-0" o.c.

Underlayment: A minimum of one layer of 40 mil W.R. Grace Ice and Water Shield self-adhered underlayment or other equivalent self adhering underlayment complying with ASTM D 1970 applied over the plywood deck.

Anchorage to Roof Decking: The metal roof panels shall be fastened in accordance with Table 1. The metal roofing panels shall be secured to the roof deck with AMSI Corporation panel clips (Part no. 150-FC-24-G). The panel clip is 24 gauge L-shaped galvanized steel that measures 2 inches wide x 1.58" high with the outstanding leg of 0.875". Each clip is secured to the roof deck with two (2) minimum No. 10-12 (12 threads per inch) x 1.5" long Pancake head wood screws as indicated in Table 1. The metal roof panel fasteners shall be long enough to penetrate completely through the plywood structural panels with a minimum exposure of 3/16 inch below the underside of the wood structural panels. The clips shall be located at the panel ends and spaced as indicated in Table 1. The panel side joints are double-locked field formed using a power seamer.

Trims, Closures, and Accessories: Components, such as the eave trim, rake trim, ridge trim, hip trim, and valley trim shall be installed as required by Lone Star A. Metal Roofing Systems, Inc.

Note: The manufacturer's installation instructions shall be on the job site during the installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC); the International Building Code (IBC); and the Texas Revisions.